

### **Remarks/Arguments**

The Office Action of November 24, 2003 and the references cited therein have been carefully studied and reviewed, and in view of the foregoing Amendment and following representations, reconsideration is respectfully requested.

Claim 1 – 12 have been canceled. Claim 13, drawn to the elected invention, has been added so as to patentably distinguish the present invention over the references to Yonemitsu et al. (USP 5,788,447) and Muka (USP 6,062,798).

More specifically, new claim 13 sets forth that a number of the process chambers 32a (or 32b in the embodiment of FIG. 4) are disposed side-by-side in a first axial direction at a first side of transfer chamber 30a, that similarly a number of load lock chambers 34a (or 34b) are disposed side-by-side in the same axial direction at a second side of the transfer chamber 30b, and that the robot Ra has a robot arm that has three degrees of independent movement, and an extendable/retractable wafer support 18 supported by the arm, to accomplish the transfer of wafers between each corresponding pair of load lock and process chambers if desired. One of the degrees of movement of the robot arm is that of being linearly translatable in the first axial direction in which the chambers are disposed side-by-side (as shown by the double-headed arrow adjacent the top of the robot arm Ra in FIGS. 3 and 4 and per the notation made in par. [0100]).

In the embodiment of FIG. 13 of Yonemitsu et al. relied on by the Examiner, the process chambers 70 are arranged circumferentially along the transfer chamber as

spaced from each other by angular intervals of 45°. Thus, Applicants respectfully assert that such chambers 70 can not be reasonably considered as being disposed side-by-side in an axial direction. In any case, though, the load lock chambers 30 are not disposed side-by-side at any of the levels, as only one load lock chamber 30 is disposed at each level. Still further, the robot 60 does not have **both** a robot arm that is linearly translatable in the same direction in which chambers are disposed side-by-side, and an extendable and retractable wafer support at the end of such an arm.

In Muka, in the embodiment of FIGS. 2-3, the elevator modules 30 are not disposed at a plurality of levels, as distinguished from Applicants' claimed load lock chambers 34a (or 34b). In addition, the robot shown in FIG. 3 is structurally different from Applicants' claimed robot, e.g., does not have a robot arm that is linearly translatable in an axial direction in which the process chambers 26, 28 or 27,29 are disposed side-by-side at a respective level.

In the embodiment of FIGS. 5A and 5B, the process chambers 102 are not disposed side-by-side in a first axial direction. Rather, the process chambers are spaced from one another by angular intervals of 60°. In addition, the robot in the transfer chamber 104 is different from that of Applicants' claimed invention, e.g., does not have a robot arm that is linearly translatable in an axial direction.


For these reasons, namely because of the differences between Applicants' invention, as is now claimed, and each of the embodiments disclosed in the Yonemitsu et al. and Muka references, it is seen that the references do not anticipate

Applicants' claims under 35 USC 102. Accordingly, early reconsideration and allowance of the claims are respectfully requested.

Respectfully submitted,

VOLENTINE FRANCOS, PLLC

By:

  
Michael Stone  
FOR: Reg. No. 32,442

Reg No 33289

VOLENTINE FRANCOS, PLLC  
12200 Sunrise Valley Drive, Suite 150  
Reston, VA 20191  
(703) 715-0870

Date: February 13, 2004